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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,858	10/27/2006	Kazuhiko Ueda	Q95836	2917
23373 7590 08/26/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER LOEWE, ROBERT S				
ART UNIT		PAPER NUMBER		
1796				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,858

Applicant(s)

UEDA ET AL.

Examiner

ROBERT LOEWE

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/7/08 has been entered.

International Search Report

The "X" references, cited on the international search report, were not relied upon since as noted in the written opinion of the international search authority, none of the cited X references teach both a high and a low molecular weight hydrolyzable group-containing organic polymer (i.e., components (A) and (B) of instant claim 1). Said X references do not anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toda et al. (JP 05-302026) in view of Watabe et al. (JP 05-059267). A machine-translated version of Toda et al. will be relied upon for the rejection below and a certified English-language translation has been requested and will be included in the next Office action. A certified English-language translation of Watabe et al. has already been obtained and was relied upon in the previous Office action.

Toda et al. teaches a composition comprising (A) an oxyalkylene polymer having a molecular weight of from 4,000-30,000 and having at least two hydrolyzable silyl-groups at the chain ends (paragraph 0002), such oxyalkylene polymers being prepared by a hydrosilylation reaction of an allyl-terminated polyether with the silane of formula (1). Formula (1) of Toda et al. satisfies the structural limitations of formula (1) of the instant claims. Integer "a" can include 0 or 1, which inherently yields a polyether having greater than 2 hydrolyzable silanes per polymer. The molecular weight range taught by Toda et al. partially encompasses that of instant claim 1. Toda et al. further teaches 3-60 parts of a resin (paragraph 0019) such as rosin ester resins (paragraphs 0015-0016).

Toda et al. does not explicitly teach the addition of an oxyalkylene polymer having the structural and molecular weight limitations of instant claim 1 [component (B) of instant claim 1].

However, Watabe et al. does teach the addition of such oxyalkylene polymers (paragraphs 0030-0036) which substantially comprise polyethers and preferably have from 0.5 to 1.2 hydrolyzable groups per polymer and preferably have molecular weights of from 2,000 to 4,000. The molecular weight range and hydrolyzable group content satisfy the limitations of component (B) of instant claim 1. Toda et al. and Watabe et al. are combinable because they are from the same field of endeavor, namely, curable compositions comprising silyl-terminated polyethers, and curing catalysts. Further, both Toda et al. and Watabe et al. are interested in preparing compositions which are used as sealants. At the time of the invention, a person having ordinary skill in the art would have found it obvious to add the low molecular weight oxyalkylene polymers as taught by Watabe et al. into the compositions taught by Toda et al. and would have been motivated to do so since Watabe et al. teaches that the low molecular weight oxyalkylene polymers are effective plasticizers and display low migration, allowing the compositions to be pliable (paragraphs 0003 and 0007). Watabe et al. further teaches that the low molecular weight oxyalkylene polymers are superior plasticizers when compared to other known plasticizers such as phosphoric acid esters, and aromatic carboxylic acid esters (paragraphs 0006 and 0007). Toda et al. teaches the addition of plasticizers which include the same phosphoric acid esters and aromatic carboxylic acid esters plasticizers as taught by Watabe et al. (paragraph 0023 of Toda et al.). Based on the teachings of Watabe et al., a person having ordinary skill in the art would be motivated to employ the oxyalkylene polymer plasticizers as taught by Watabe et al. into the compositions as taught by Toda et al. because such oxyalkylene polymer plasticizers have improved properties over the plasticizers taught by Toda et al. as shown by Watabe et al. (Table

1). Embodiment 5 of table 1 shows the employment of dioctylphthalate instead of the oxyalkylene polymer plasticizer showed a dramatically higher weight loss.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba et al. (US Pat. 6,706,813) in view of Watabe et al. (JP 05-059267).

Chiba et al. teaches a curable composition comprising a hydrolyzable group-containing (3:17-36) polymer having a molecular weight of 500 to 100,000 (4:17-19), which partially encompasses the range of component (A) of instant claim 1. Chiba et al. further teaches that there are preferably from 1.1 to 5 reactive silicon groups per molecule of the isobutylene polymer on average (3:61-63). Chiba et al. further teaches the addition of tackifiers, such as terpene resins and rosin ester resins (6:24-39), which may be present in the amounts required by instant claim 1 (6:35-38).

Chiba et al. does not explicitly teach the addition of an oxyalkylene polymer having the structural and molecular weight limitations of instant claim 1 [component (B) of instant claim 1]. However, Watabe et al. does teach the addition of such oxyalkylene polymers (paragraphs 0030-0036) which substantially comprise polyethers and preferably have from 0.5 to 1.2 hydrolyzable groups per polymer and preferably have molecular weights of from 2,000 to 4,000. The molecular weight range and hydrolyzable group content satisfy the limitations of component (B) of instant claim 1. Chiba et al. and Watabe et al. are combinable because they are from the same field of endeavor, namely, curable compositions comprising silyl-terminated polymers, and curing catalysts. Further, both Chiba et al. and Watabe et al. are interested in preparing compositions which are used as sealants. At the time of the invention, a person having ordinary

skill in the art would have found it obvious to add the low molecular weight oxyalkylene polymers as taught by Watabe et al. into the compositions taught by Chiba et al. and would have been motivated to do so since Watabe et al. teaches that the low molecular weight oxyalkylene polymers are effective plasticizers and display low migration, allowing the compositions to be pliable (paragraphs 0003 and 0007). Watabe et al. further teaches that the low molecular weight oxyalkylene polymers are superior plasticizers when compared to other known plasticizers such as chlorinated paraffins and aromatic carboxylic acid esters (paragraphs 0006 and 0007). Chiba et al. teaches the addition of plasticizers which include the same chlorinated olefins/paraffins and aromatic carboxylic acid esters plasticizers as taught by Watabe et al. (6:6-23 of Chiba et al.). Based on the teachings of Watabe et al., a person having ordinary skill in the art would be motivated to employ the oxyalkylene polymer plasticizers as taught by Watabe et al. into the compositions as taught by Chiba et al. because such oxyalkylene polymer plasticizers have improved properties over the plasticizers taught by Chiba et al. as shown by Watabe et al. (Table 1). Embodiment 5 of table 1 shows the employment of dioctylphthalate instead of the oxyalkylene polymer plasticizer showed a dramatically higher weight loss.

Response to Arguments

Applicant's arguments filed 8/7/08 have been fully considered but they are not persuasive.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Loewe whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L./
Examiner, Art Unit 1796
21-Aug-08

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796